

Safety Data Sheet Librel® RMX 25

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1. Identification

Product identifier used on the label

Librel® RMX 25

Recommended use of the chemical and restriction on use

Recommended use*: Chelate

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION 100 Park Avenue Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Combustible Dust (1) Combustible Dust

Label elements

Signal Word: Warning

Hazard Statement:

May form combustible dust concentration in air.

^{*} The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 90 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 90 % oral

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 90 - 91 % Inhalation - dust

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

Organic powders may be capable of generating static discharges and creating explosive mixtures in air. Handle with caution.

Refer to MSDS Section 7 for Dust Explosion information.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
12008-41-2	>= 1.0 - < 3.0 %	disodium octaborate
5064-31-3	>= 0.0 - <= 0.1 %	trisodium nitrilotriacetate

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	<u>Chemical name</u>
234446-82-3	95.0 - 99.0 %	Magnesium, EDTA cobalt copper iron manganese zinc
		complexes
12008-41-2	1.0 - 5.0 %	disodium octaborate

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water.

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If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

dry powder, foam

Unsuitable extinguishing media for safety reasons:

carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours, nitrogen oxides, carbon oxides

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:

Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

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Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Information regarding personal protective measures see, section 8.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of. For large amounts: Contain with dust binding material and dispose of. Avoid raising dust.

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Closed containers should only be opened in well-ventilated areas.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:
Avoid extreme heat.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

disodium octaborate

ACGIH TLV

TWA value 2 mg/m3 Inhalable fraction; STEL value 6 mg/m3 Inhalable fraction; TWA value 2 mg/m3 Inhalable fraction; STEL value 6 mg/m3 Inhalable fraction;

Advice on system design:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to

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prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: free flowing fine granules

Odour: mild Green green

pH value: 5 - 9 (20 g/l)

Melting point: The substance / product decomposes

therefore not determined.

Boiling point: not applicable Flash point: not applicable

Flammability: not readily

ignited

Lower explosion limit: not applicable Upper explosion limit: not applicable

Vapour pressure: < 0.000001 hPa (25 °C)

Density: approx. 1.73 (20 °C) (OECD Guideline 109)

g/cm3

Relative density: 1.73 (OECD Guideline 109)

Bulk density: 700 - 1,000

kg/m3

Partitioning coefficient n- not applicable

octanol/water (log Pow):

Self-ignition not self-igniting temperature:

Thermal decomposition: > 100 °C

Viscosity, dynamic: not applicable
Particle size: (measured)
% volatiles: not determined
Solubility in water: soluble

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10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties: not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product may contain explosive fine dust or such dust may be produced by abrasion during transport or product transfer.

Conditions to avoid

Avoid extreme temperatures. Avoid humidity.

Incompatible materials

strong oxidizing agents, strong alkalies

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 100 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Primary routes of entry

Inhalation. Ingestion. Skin Eyes

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion.

<u>Oral</u>

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

<u>Inhalation</u>

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Type of value: ATE Value: > 5.0000 mg/l Determined for dust

Dermal

Type of value: ATE Value: > 5,000 mg/kg

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin.

Skin

Result: non-irritant

<u>Eye</u>

Result: non-irritant

Chronic Toxicity/Effects

Genetic toxicity

Genetic toxicity in vitro: OECD Guideline 471 Bacterial reverse mutation assay Salmonella typhimurium:negative

Other Information

On the basis of the product's composition, no acute general toxic effects are to be expected. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

Symptoms of Exposure

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish

LC50 > 100 mg/l

Aquatic invertebrates

EC50 (48 h) > 100 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

Bioaccumulative potential

Bioaccumulation potential

Significant accumulation in organisms is not to be expected.

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Mobility in soil

Assessment transport between environmental compartments

No data available.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

13. Disposal considerations

Waste disposal of substance:

Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RCRA:

Not a hazardous waste under RCRA (40 CFR 261).

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

VOC content:

not determined

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Fire (Combustible Dust);

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CERCLA RQCAS NumberChemical name10 LBS143-33-9Sodium Cyanide

State regulations

State RTKCAS NumberChemical nameNJ12008-41-2disodium octaborate

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 1 Flammability: 1 Physical hazard:0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2015/02/24

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Data Sheets. In case you have questions concerning such changes please contact us at the address mentioned in Section I.

END OF DATA SHEET